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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/579,329	07/13/2007	Yasushi Miyajima	290788US8PCT	1876
22850 7590 10/12/2010 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER RAJAN, KAI	
			ART UNIT 3769	PAPER NUMBER
			NOTIFICATION DATE 10/12/2010	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/579,329	Applicant(s) MIYAJIMA ET AL.	
	Examiner Kai Rajan	Art Unit 3769	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 August 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5,6,8-16,19-31,33-40,42 and 43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5,6,8-16,19-31,33-40,42 and 43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/28/2010</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The Examiner acknowledges the amendment filed August 6, 2010.

Response to Arguments

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 8 – 16, 19 – 27, and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Engstrom U.S. Patent No. 6,549,756 in view of Kasa et al. U.S. Patent No. 4,625,732 (“Kasa”).

Engstrom discloses an input device, comprising:

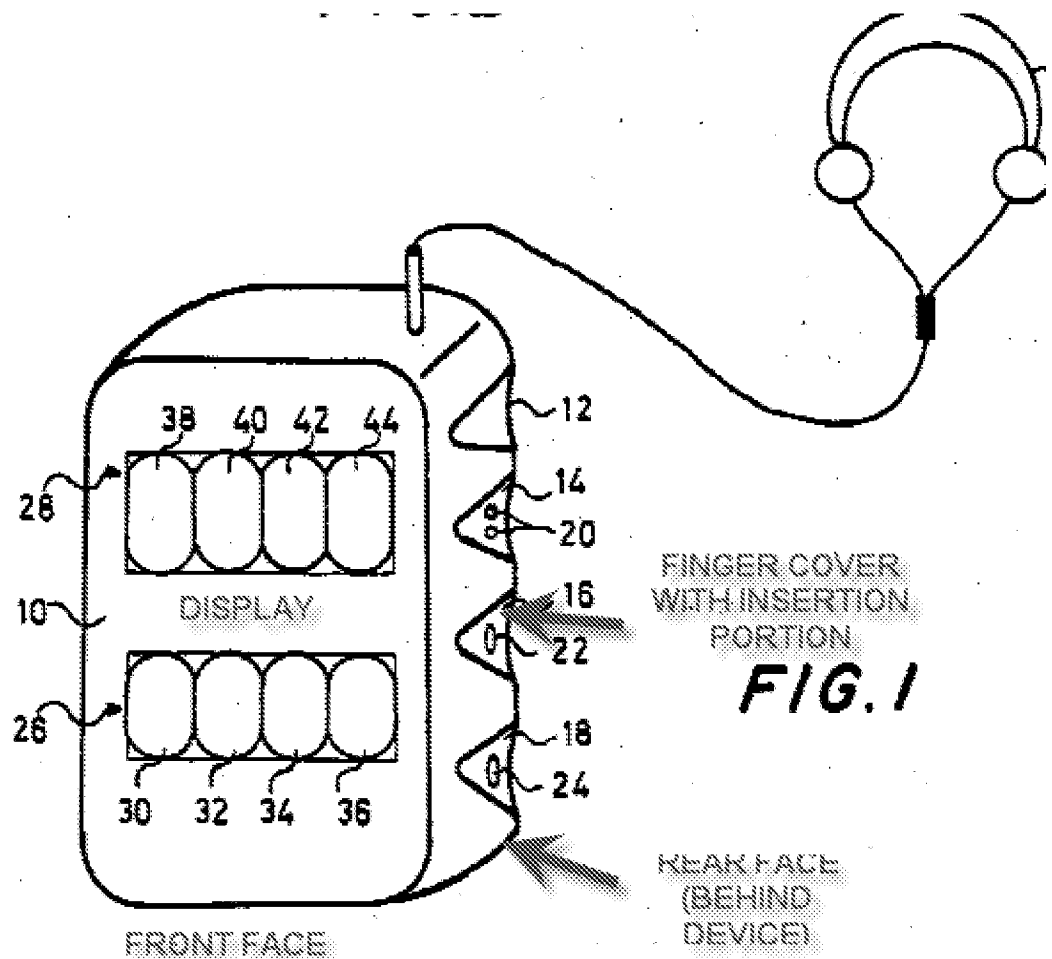
a body having an interior portion containing electronics that are configured to perform a wireless communication including at least one of a mobile telephone communication and

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television remote controller communication (Engstrom column 2 lines 51 – 66 personal digital assistant (PDA) with mobile telephone capabilities); and

bioindex detecting means for detecting a pulse wave, the front facing portion including a display screen, (Engstrom column 2 lines 51 – 67, column 3 lines 1 – 16, column 4 lines 7 – 19, figure 2 PDA contains numerous sensors along the sides of the device casing for measuring blood flow rates processed into heart rate data. PDA has a display 202 on the front);

Furthermore, Engstrom fails to disclose a pulse wave sensor with a finger holding cover disposed on the rear facing portion of the personal digital assistant. However Kasa a reference in an analogous art of physiological monitoring discloses a handheld physiological monitoring device, with indentations disposed along a rear facing edge of the device (see figure below).



As shown above in figure 1 of Kasa, the device has a front face with a display, and a rear face (not shown) to which several indentations open toward. The indentations comprise a “finger holding cover” and are substantially the same shape as a finger tip, and face toward the rear of the device. A finger tip insertion portion is formed by the space created by the indentations, and sensors including pulse wave sensors are disposed in the indentations. It would have been obvious to one of ordinary skill in the art at the time of invention to modify the sensors disposed on the device of Engstrom with the rear facing indentations formed in the housing of Kasa, since Kasa teaches using the indentations to collect reliable and uniform

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physiological data while holding a device (Kasa column 1 lines 5 – 67, column 2 lines 1 – 55).

Furthermore, Engstrom states that sensors may be distributed on a number of locations to collect physiological data using combinations of sensors depending on how the user holds the device (Engstrom column 3 lines 7 – 16). Although figure 7 of Applicant's drawings show a finger cover and sensor formed on the opposite face of a cellular phone instead of at the rear corner of the face such as Kasa, it is submitted that since there are multiple ways to hold a device, the placement of sensors can be arranged in various configurations to accommodate those ways. Therefore, under the teachings of Kasa and Engstrom, it would be obvious to one of ordinary skill in the art to place sensors on the sides or rear face of the phone depending on the intended way of holding the device.

Independent claims 20 and 26 are rejected on substantially the same basis as claim 1.

Note to Applicant: See previous action for rejection to unaddressed dependent claims, as they are rejected on substantially the same basis as the Office action of July 9, 2009 by citations to Engstrom.

Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Engstrom U.S. Patent No. 6,549,756 in view of Kasa et al. U.S. Patent No. 4,625,732 ("Kasa") as applied to claims 1, 20, and 26 above, further in view of Mault et al. U.S. PGPub No. 2003/0208113.

Regarding claim 43, Engstrom discloses a personal digital assistant with embedded sensors on either side of the casing. Engstrom fails to explicitly teach using the personal digital assistant for controlling of any one of electronic equipments including personal computer, television image receiver, video and/or audio signal recording and/or reproducing device and air conditioner. However, Mault et al. a reference in an analogous art of physiological monitoring disclose a personal digital assistant used for collecting physiological data that communicates with a home computer, television, or entertainment device via wireless communication (Mault et al. paragraph 0078). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the uses of a personal digital assistant as taught by Mault et al. to the device of Engstrom, since the structure and capabilities of personal digital assistants are equivalent.

Claims 3, 5, 6, 28 – 31, and 33 – 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Engstrom U.S. Patent No. 6,549,756 in view of Kasa et al. U.S. Patent No. 4,625,732 (“Kasa”) as applied to claims 1, 2, 8 – 16, and 19 – 27 above, and further in view of Yollin U.S. Patent No. 5,990,866.

In regard to claims 3, 5, 28, and 35, Engstrom, Mault et al., and Kasa disclose detecting heart rate from a plurality of sensors disposed on a mobile device (Engstrom column 2 lines 51 – 67, column 3 lines 1 – 16), yet fail do disclose measuring temperature or galvanic skin response. However, Yollin a reference in an analogous art of collecting physiological data, discloses collecting physiological data via at least GSR, heart rate, and temperature sensors (Yollin

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column 4 lines 2 – 22). It would have been obvious to one of ordinary skill in the art at the time of the invention to substitute the heart rate sensors of Engstrom, Mault et al., and Kasa with the GSR or temperature sensors of Yollin, since Yollin discloses that it is known in the art of physiological monitoring to use any number of alternative sensors depending on the breadth and complexity of the physiological information sought (Yollin column 4 lines 2 – 22).

Note to Applicant: See previous action for rejection to unaddressed dependent claims, as they are rejected on substantially the same basis as the Office action of July 9, 2009 by citations to Engstrom.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kai Rajan whose telephone number is (571)272-3077. The examiner can normally be reached on Monday - Friday 9:00AM to 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Johnson can be reached on 571-272-4768. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kai Rajan/
Examiner, Art Unit 3769

/Henry M. Johnson, III/
Supervisory Patent Examiner, Art Unit
3769

October 4, 2010